MYP DESIGN OVERVIEW

MYP 2 – Grade 7

All units taught are continuously being developed and improved to best meet the needs of the students at Digital Private School. Therefore the following overview is only a reflection of current plans for the course. Some changes to these course overviews may occur as a result of planning done throughout the academic year.

	Unit Title **(in order)**	**Key Concept**	**Related Concepts**	**Global Context**	**Statement of Inquiry**	**MYP Subject Group objectives**	**ATL Skills**	**Knowledge, skills, content**	**Summative Assessment**
		Is this one of the KC assigned to your subject group?	Have you chosen more than two?	Have you looked through the different explorations?	How are the KC, RC and GC connected to create this big idea?	What MYP Criteria and strands will be assessed in this unit?	What ATL skill will be explicitly taught in this unit?	What body of knowledge will be covered in this unit?	
Product design	Cultural Keyring	Communication	Markets & Trends Resources	Personal Expression; Appreciation of the Aesthetics	**Communication of cultural expression and a countries resources can affect international market trends**	**A: i, ii** **B: i, ii, iii** **C: ii, iiii,** **D: iii, iv.**	Thinking Skills: Critical Thinking Creative Thinking	Basic research, designing, 2D CAD, CAM	
Digital design	Digital Invitation Card Production	Communication	Form	Personal and Cultural expression	Individuals may deliver their personal and cultural expressions by using different forms of communication.	**A**: i, iii **B**: ii, iii **C**: i, ii, iii **D**: i, ii, iv	• Communication skills • Research skills: • Information literacy • Media literacy	1- Organize page layout 2- Format text 3- Inserting media 4- Editing techniques	Create an invitation card for a cultural celebration for a chosen country.

Coding	Automated system - Floor Cleaner	Communication	Function, Connection, Innovation	Identities and relationships	Identifying the relationships between the environment and the digital devices may promote the innovation of functional systems which have better communication with each other.	**A:** , ii, iii, iv **B:** iii, iv **C:** i, ii **D:** iii, iv	• Thinking Skills, • Research Skills	Interactive Technologies 1.C programming Structure. 2. Digital and Analog interfaces, 3. Signal transmission 4. Reading environment 5. Decision making	Students will be divided into small groups, and each group will be tasked with designing and creating an Automated System project that incorporates the concepts covered in the activity-based learning topics.

MYP DESIGN OVERVIEW

MYP 3 – Grade 8

All units taught are continuously being developed and improved to best meet the needs of the students at Digital Private School. Therefore the following overview is only a reflection of current plans for the course. Some changes to these course overviews may occur as a result of planning done throughout the academic year.

	Unit Title **(in order)**	**Key Concept**	**Related Concepts**	**Global Context**	**Statement of Inquiry**	**MYP Subject Group objectives**	**ATL Skills**	**Knowledge, skills, content**	**Summative Assessment**
		Is this one of the KC assigned to your subject group?	Have you chosen more than two?	Have you looked through the different explorations?	How are the KC, RC and GC connected to create this big idea?	What MYP Criteria and strands will be assessed in this unit?	What ATL skill will be explicitly taught in this unit?	What body of knowledge will be covered in this unit?	
Product design	F1 Cars	Development	Innovation Form Function	Scientific & Technical Innovation; Product	**Successful product development may come from the combining of form and function, and aided by scientific & technical innovation.**	All Strands from All Criterions **A:** i, ii **B:** i, ii, iii **C:** ii, iv, v **D:** iii, iv	Social - Collaboration, Thinking - Critical Thinking	Design & manufacturing an F1 model racing car. 3D CAD skills using OnShape. 2D CAD skills using Gravity, CAD/CAM skills using 3D Printer	

Digital design	Physical and Health Education Community Website **(IDU)**	Communities	Form Sustainability	Globalization and sustainability	Sustainable communities may promote globalization.	**A:** i, ii, iii **B:** i, ii, iv **C:** i, ii **D:** iii, iv	• Research skills • Information literacy • Media literacy • Communication • Creative thinking skills	1- Multimedia production such as editing videos, infographics, and images for visual content. 2- Content writing and management 3- Web development skills	Create a community website to coach and aid in handball skills and nutritional requirements
Coding	Integrated Smart City Model	Communication	Function, System, Innovation	Scientific and technical innovation	This unit focuses on the ways digital devices interact with users, each other, and the environment. Understanding the function of the modern systems leads to scientific and technical innovation.	**A:** , ii, iii, iv **B:** iii, iv **C:** i, ii **D:** iii, iv	Thinking Skills, Research Skills	Digital Interactions and Innovations 1.Digital displays and input methods 2.Building weather monitoring system 3.Building wireless robots 4.Uploading data to the cloud using ESP32, exploring IoT concepts	IoT Integrated Smart City Model In this assessment activity, students will work in groups to design and create an IoT integrated smart city model that incorporates various concepts from the provided list.

MYP DESIGN OVERVIEW

MYP 4 – Grade 9

All units taught are continuously being developed and improved to best meet the needs of the students at Digital Private School. Therefore the following overview is only a reflection of current plans for the course. Some changes to these course overviews may occur as a result of planning done throughout the academic year.

	Unit Title **(in order)**	**Key Concept**	**Related Concepts**	**Global Context**	**Statement of Inquiry**	**MYP Subject Group objectives**	**ATL Skills**	**Knowledge, skills, content**	**Curriculum**
		Is this one of the KC assigned to your subject group?	Have you chosen more than two?	Have you looked through the different explorations?	How are the KC, RC and GC connected to create this big idea?	What MYP Criteria and strands will be assessed in this unit?	What ATL skill will be explicitly taught in this unit?	What body of knowledge will be covered in this unit?	
Product design	Chocolate Moulds	Development	Collaboration Adaptation	Scientific and Technical Innovation	**Product development may come from collaboration, adaptation and through the support of scientific & technological advances**	A i. ii, iv. v B i. ii, iv. v C i. ii, iv. v D i. ii, iv. v	Communication, Thinking	Graphic Design using CAD 3D Printing Packaging	

Digital design	Using and analyzing spreadsheets	Systems	Form Function	Scientific and Technical Innovation	Scientific and technical innovations drive systems design by optimizing form and functions.	All strands are included.	• Thinking skills • Critical thinking skills	1- Moving around the Worksheet / Spreadsheet, Rows, Columns, Cells 2-Understanding Formulae 3- Common Formulae 4- Relative and Absolute References 5- Changing Views 6- Conditional Formatting 7- Sorting and filtering	To create a database, edit and manage it by using Google Sheets.
Coding	Build and Document a Multifunctional Weather Station	Development	Adaptation Sustainability, Innovation	Scientific and Technical Innovation	Development of smart systems can be done by scientific and technical innovation which adaptable to the real world conditions.	**A**: i, ii, iii **B**: ii, iii **C**: i, ii, iii **D**: i, ii, iv	Thinking Skills Social Skills Self management skills	Exploring Digital Intelligence, Wireless technology 1. Remote controlled cars 2. Internet of Things 3. Python Fundamentals 4. Robotics With python	Build and Document a Multifunctional Weather Station: To assess the understanding of electronics, programming, data handling, and problem-solving skills gained from the mentioned activities.

MYP DESIGN OVERVIEW

MYP 5 – Grade 10

All units taught are continuously being developed and improved to best meet the needs of the students at Digital Private School. Therefore the following overview is only a reflection of current plans for the course. Some changes to these course overviews may occur as a result of planning done throughout the academic year.

	Unit Title (in order)	Key Concept	Related Concepts	Global Context	Statement of Inquiry	MYP Subject Group objectives	ATL Skills	Knowledge, skills, content	Summative Assessment
		Is this one of the KC assigned to your subject group?	Have you chosen more than two?	Have you looked through the different explorations?	How are the KC, RC and GC connected to create this big idea?	What MYP Criteria and strands will be assessed in this unit?	What ATL skill will be explicitly taught in this unit?	What body of knowledge will be covered in this unit?	
Product design	Eco-Friendly Animal Enclosure	Development	Innovation and Resources	Globalization & Sustainability; Conservation	**Development of successful conservation products may result from the ability to use resources in an innovative way.**	A; i, iii, iv B; i, ii, iii, iv C; i, ii, iii, iv D; iii, iv	Thinking - Transfer Skills - Apply skills and knowledge in unfamiliar situations Thinking - Creative Thinking - Generate impossible ideas Social - Collaboration - Be empathetic	Model making, manufacturing skills, CAD, Design Cycle Students will design and construct a model of an animal enclosure for a new zoo opening in Muscat.	Design and construct an eco-friendly animal enclosure.

Digital design	Exploring Digital Marketing & Advertising	Creativity	Markets and Trends Innovations	Globalization and Sustainability	Innovating creative digital marketing campaigns and advertisements that aligns with markets and trends takes an important role in globalization and sustainability.	All strands are included.	• Thinking Skills: • Creative Thinking • Critical Thinking • Communication Skills: • Communication	1- Introduction to Digital Marketing 2- Target Audience Analysis 3- Digital Marketing Strategies 4- Content Creation and Storytelling 5- Data Analytics and Measurement 6- Ethical and Legal Considerations	To create a marketing campaign for a chosen business and come up with a creative digital advertisement.
Coding	Smart Home Control and Monitoring System	Communication, Connection	Adaptation, Collaboration Function	Globalization and sustainability	~~Sharing the idea or~~ communication between intelligent machines and their users~~, as well as between machines themselves~~ promotes ~~the~~ adaptability and collaboration	**A**: i, ii,iii **B**: ii, iii **C**: i, ii, iii **D**: i, ii, iv	Thinking Skills Social Skills Self management skills	**Machine Intelligence** • IOT Projects • Data visualization • Turtle graphics • OpenCV • Image processing • Data visualization • Computer vision	To assess the understanding of IoT concepts, programming skills, data handling, automation, and interdisciplinary thinking gained from the mentioned activities.